

ABSTRACT

Wood is modified by treating with an aqueous water
5 repellent [I] and an emulsion water repellent [II]. The
aqueous water repellent [I] comprises a product obtained
through co-hydrolytic condensation of (A) an organosilicon
compound: $(R^1)_a(OR^2)_bSiO_{(4-a-b)/2}$ and (B) an amino-containing
alkoxysilane: $R^3R^4NR^5-SiR^6_n(OR^2)_{3-n}$. The emulsion water
10 repellent [II] is a trialkylsiloxysilicate emulsion water
repellent obtained by polymerizing (C) an organodisiloxane:
 $R^7_3Si-O-SiR^7_3$ and (D) a tetraalkoxysilane: $Si(OR^7)_4$ in an
aqueous solution containing (E) a surfactant and (F) water.
Two stages of treatment with repellents [I] and [II] can
15 impart water repellency, minimal water absorption and
dimensional stability to wood.